UTAH CITIZENS' ADVISORY COMMISSION ON CHEMICAL WEAPONS DEMILITARIZATION DESERT CHEMICAL DEPOT

Thursday, August 17, 2000 - 500 p.m. Ophir Park Ophir, Utah

MINUTES

Members Present:		GREER, Camp	EG&G
BAUER, Dan	State Science Advisor	GROENEWOLD, Jason	FAIR
BENNETT, John	SAC	HARRIS, Mark	EG&G
DOWNS, Dennis	DSHW	HINTZE, M. Marx	EG&G
BOWMAN, Jane, MD	Western OB/GYN	HOLT, Reed L.	OME
HOLT, Rosemary	Women Concerned	HUFF, Susan	DCD PAO
HULLINGER, Sid	Tooele County	JACKSON, David	PMCD
KIM, Deborah	Emergency /U of U Hospital	JOHNSON, H.T. EG&G	
OSTLER, David	SAC	JOHNSON, Patty	EG&G
		JOHNSON, Susanna	Sec. CAC
Guests Present:		KURKJY, Tom	EG&G
ADAMS, Bill	EG&G	LAMB, Lorrie	EG&G
ADAMS, Patsy	EG&G	MADDOX, Jack	EG&G
BACON, James	Program Manager, PMCD	MIHLFEITH, Max	EG&G
BENNETT, Mrs.	Citizen	MILLER, James	DCD
BILLS, Ray	TOCDF	OLIVER, Harold	DCD
CALDWELL, Monte	TOCDF	OSTLER, Sharon	Citizen
CAMPBELL, Craig	TOCDF	OWENS, Douglas	Parsons, Behle & Latimer
CANDELARIA, Marilyn	TCEM	PATTON, Gloria	Army
CISRK, Jim	EG&G	ROKICH, John	CEM
COVINGTON, JAMES	Army	ROWE, Mike	EG&G
DUNCAN, Doug	EG&G	SAGERS, Kari	TCEM
DUNCAN, Gayle	Citizen	SMITH, Don	EG&G
DUNCAN, Ms.	Citizen	TAYLOR, Nadine	CEM
DUNCAN, Stan	EG&G	THOMAN, Larry	Citizen
DUNCAN, Wendell	Citizen	WALTERS, Brad	TOCDF
ENTZ, Ron	EG&G	WALTERS, Clara	GOPB
FOWLER, Bob	CEM	WARBY, Clint	BAH
GRAY, Martin	DEQ	WESTERN, Edward	EG&G
GRENIER, Roger	TOCDF	WILSON, Kent	Battelle

WELCOME/INTRODUCTION - Chairman Dan Bauer

The meeting was called to order by Chairman Bauer. He welcomed those attending and introduced special guests Dr. Gloria Patton, James Bacon and James (Ned)Covington. Dr. Patton is the Deputy Assistant Secretary of Army (Chemical Demilitarization), Office of the Assistant Secretary of the Army (Acquisition, Logistics and Technology). James Bacon is the Program Manager for Chemical Demilitarization (PMCD) at Aberdeen Proving Ground, Maryland. Dr Covington is a former US Army Chemical Corps Colonel, who now advises the Deputy Assistant Secretary of the Army (Dr. Patton) in matters concerning the worldwide Chemical Weapons Convention and the US Chemical Demilitarization Program.

Motions were made and seconded to approve the June 15, 2000 and July 20, 2000 minutes. The motions carried. Rosemary Holt requested that the minutes are written in a presentation form with questions and answers separate from the presentation, as have been done previously. After discussion it was decided the minutes will be written in that manner.

PROGRAM STATUS - David Jackson

David Jackson, TOCDF Site Project Manager/CAMDS System Manager said the Anniston Plant facility, Pine Bluff facility and the Umatilla facility are proceeding with their construction. The CAMDS facility is working on two projects. The solvated electron technology demonstration test is for the Assembled Chemical Weapon Assessment. They put that system on hold, briefly, to solve the problems with the sulphuric acid splatter that happened on July 6th. They are now bringing it back on line. The facility preparation for that system is complete. The safety reviews are in process and will be complete the latter part of August or the first of September. The VX demonstration test will proceed after the reviews are complete. Right now they plan to run VX through the system. There will be 40 liters involved in that test.

They will also demonstrate Parsons continuous steam treatment. The process on this system is to take the contaminated parts and expose it to high technology steam to decontaminate the items. It will dry out the agent all through the system. Mr. Jackson said this technology sounds like a simple process but it is really very complex. The preparations at the facility are complete for this technology and they are getting the safety reviews and the systemmization of that system. They plan on doing the demonstration of that test in September or October.

Questions

Dave Ostler: When Gary and I were in Russia a couple of years ago, as I recall Parsons was helping them design their system in Siberia. Is that the same technology that they are using here? **Dave Jackson:** No, the continuous steam process is supporting US technologies. Mr. Bacon, are the Russians still using the decon asphalt generation system?

James Bacon: Yes. Parsons is the same firm that designed our baseline facilities and also has the ACWA steam treater technology which is really a substitute for the metal parts furnace. The process in Russia is different neutralization than we have in the United States. It is an organic acid compound neutralization and the final product is turned into asphalt. In terms of feasibility it has a long way to go. There will certainly be a lot of testing of that particular technology that the Russians are proposing.

PLANT STATUS - Mike Rowe

Mike Rowe, General Manager of EG&G Defense Materials, said at TOCDF the metal parts furnace and the liquid incinerators are up and running. The deactivation furnace is still off line. They are currently processing 105mm non-energetic GB projectiles and GB ton containers. They have processed almost 450,000 GB 105mm projectiles and 4,700 GB ton containers. Those processes are moving forward at rate of 12 to 15 projectiles a day and 6 to 7 ton containers a day. They have completed about 75% of the GB stockpile. That equates to about 15% of the total stockpile in the United State. They are approaching 300,000 man hours without a lost work day case. There has not been any detectable agent release from the stack nor any 3 or 4 incidents since the last CAC meeting. Mr. Rowe concluded by introducing his boss H. T. Johnson, President of EG&G Technical Services. Mr. Johnson is visiting TOCDF.

Ouestions

Jane Bowman: Could you tell us when the deactivation furnace will be going on line? *Mike Rowe:* The deactivation furnace modifications are in the functional testing phase right now. We have the Department of the Army, PCMD and the state working with us on that phase. We expect to submit the certification and paper work in the next few days. We hope to submit a request to the state to restart around August 22nd to August 25th. The certification and paper work are documents that are required by the permit. A professional engineer verifies those documents.

Jason Groenewold: Have there been any stack or duct alarms since you began operations in the last month? Are you planning to submit any modifications to the state regarding the deactivation furnace?

Mike Rowe: To the first question, yes, there have been two stack alarms. Second, all of the design changes that have been made to the deactivation will be submitted in accordance with our permit to the state.

Jason Growenwold: When do you expect that to be submitted?

Mike Rowe: I believe we will have the last one submitted either Friday or Monday.

Jason Groenewold: Will there be any public comment on those modifications?

Mike Rowe: It depends on the class of modifications. Marty, can you address that?

Marty Gray: The first modification was the isolation valve and that has been submitted as a class one modification so there is no public comment period. We are not exactly sure what is coming next. If it is higher than a class one mod there will be a public comment period.

Jason Groenewold: Have there been any changes inside the feed chute?

Marty Gray: They talked to us about some ideas and we don't know if they have implemented any of those.

Mike Rowe: The design changes that are being installed right now will go through the modification process. They are essentially installed hydro lockers.

Jason Groenwold: What caused the stack alarms? Were they associated with the liquid incinerators?

Mike Rowe: There were no other associated alarms. We did not identify the cause.

STOCKPILE REPORT - Harold Oliver

Harold Oliver reported that there had not been any leakers detected in the storage area since the last CAC meeting. There were two vapor leakers on items that had been shipped to the plant. One in an onsite container and the other had just been removed from the container.

Questions

Jason Groenewold: Were you able to find any information on the cost of filtering the various onsite igloos?

Harold Oliver: Yes, I brought a letter that I will leave with Danny.

Jason Groenwold: Is there any testing being done on the M40 masks to ensure the quality of those masks?

Harold Oliver: As I said at the last meeting, every mask on the base is tested. It is tested before issue. It is brought into the maintenance facility every six months and is tested. There is an annual test that is in more detail. In addition, each operator that has a mask is required to an inspection of his/her own mask each month.

STOCKPILE/NON-STOCKPILE UPDATE

Dr. Gloria Patton - Deputy Assistant Secretary of Army Chemical Demilitarization

Dr. Patton began by thanking the CAC for the invitation to come to Tooele. She has also been visiting other CAC meetings at other sites. She is impressed by the interest that is shown by the public in Tooele County. She said the successes in the chem demil program are brought about by the partnership that is formed by the community and the people who are doing the work.

James Bacon - Program Manager for Chemical Demilitarization

Mr. Bacon also expressed appreciation for the invitation from the CAC. He said that he finds support all around the country to eliminate the chemical stockpile. He then addressed the overall progress in the program.

Mr. Bacon said 96% of the stockpile at JACADS is gone. There are 13,000 land mines with VX nerve agent remaining. They will start processing those in September and finish by Christmas. At TOCDF over 30% of the stockpile has been eliminated. He said between the two it adds up to over 20% of the nations stockpile that has been safely eliminated. Safety is their number one priority.

The May 8th event at TOCDF caused them to stop and evaluate how they are doing. They have made some process improvements, procedural changes and retraining of the workers. All of those who were involved in the investigation have been reviewing all of the changes.

Mr. Bacon said the non-stockpile program is progressing but it is complex and diverse. The goal is to eliminate the United States capabilities to produce chemical weapons as well as take care of all of the buried weapons that may be recovered as well as the small stocks that exist at each of the chemical depots. Part of the non-stockpile program is to develop portable treatment systems to take to the recovery sites and process them in safe manner.

Mr. Bacon added that they are also working with the Russians to help them eliminate their stockpiles. The goal is to eliminate all of the stockpiles throughout the world.

Mr. Bacon touched on the budget for the chem demil program. Of the money requested by

PMCD there was a 23 million dollar reduction in the appropriations bill that was signed by President Clinton. It was less than 1% of the total request and they don't see that it will be an impact on the program. Initially the House recommended a reduction of 175 million dollars but Dr. Patton, Mr. Bacon and PMCD were able to demonstrate to members of the House that they did not have accurate information about the program. Mr. Bacon said one of the key ingredients for Congress to fund the chem demil program is strong support from the communities and the desire to eliminate chemical weapons from their communities. Congress has been willing to help to expedite the destruction of the weapons systems. Dr. Patton added for the last six months she has been taking factual information to Congress. She said that there is a lot of anecdotal information that people gather from news paper articles and it seems to make it to the ears of Congress faster than the facts. Through Dr. Patton's efforts Congress recognizes the public's interest, the risk to the public of these aging weapons as opposed to destroying them and that the Army's primary goal is safety.

Questions

Dave Ostler: How are the Russians doing with their program?

James Bacon: It is slow. Funding is a big problem. *Dave Ostler:* Will they get it done by the deadline?

James Bacon: They have asked for an extension. At the end of the five year mark from implementations of the chemical weapons convention we were all supposed to have at least 1% of our stockpile destroyed. The U.S. had almost 20% and the Russians had zero so they asked for a two year extension and it was granted. Practically speaking they have not yet started.

Rosemary Holt: First, thank you for coming to Utah. Regarding your letter of June 1st that was sent to the stakeholders concerning the non-stockpile. We have the MMD-1 and the RRS here and we anticipated they would be used to take care of the non-stockpile for the next 40 years. Now Congress asks you to look at what would be a cheaper way to do it. With the change in the October 1999 law we are concerned that non-stockpile will be brought to TOCDF from other sites. Could you clarify for us where you stand on the issue of using stockpile incinerators for non-stockpile? Also, what is happening with the MMD-1 and the RRS?

Dr. Patton: I will take part of that question. The language in that letter stated "to examine the feasibility" of non-stockpile materiel being destroyed in incineration or alternative technology stockpile facilities. Nothing could be done until it is permitted. The public would be involved in any decision as to whether non-stockpile materiel here could be destroyed at the stockpile facility here.

There is sufficient money to continue to do research, development and validation of the MMD-1 and RRS. It has not yet been determined what non-stockpile materiels would be destroyed, if they were destroyed, in a stockpile destruction facility versus the mobile units. No decision has been made and the study is ongoing. It is the Congress that asked for it and it is the Congress that will make the decision based on the study.

James Bacon: Our first priority is to use the best and safest process for the recovery of the non-stockpile materiel. My purpose in sending out the letter to all stakeholders was to involve the public and to inform them. The non-stockpile is not a large cache of weapons but it is the same

materials that already exist in the stockpile depots. It is derived from sampling programs for safety purposes back in the early 80's. It is the same material that is in a ton container such as GB and VX. It comes from the time when the Army was doing sampling and surveillance. Congress asked us to look and see if we can process those hazardous materials that are already on the sites. When Oregon issued the permit for the destruction of the stockpile they included the requirement that the non-stockpile material stored at Umatilla also be destroyed in the stockpile facility. We are going through that feasibility assessment with the same criteria as I mentioned before. We are looking at safety, environmental protection, scheduling and if it would be cost effective.

Rosemary Holt: Do you anticipate, if you have permission from the state regulators, that you might transport non-stockpile across state lines to an incineration site?

Dr. Patton: The law does not allow transporting non-stockpile across state lines but there are limitations within that law. I think that it would be premature to respond to that question because we don't yet know if it is feasible.

Rosemary Holt: We are prematurely concerned about that.

Dr. Patton: You will be involved. You will have the right to speak up if it is ever considered because it would require a permit by the state.

Rosemary Holt: Could you explain the House hearing that is going to take place September 21st? **Dr. Patton:** That was called by Rep. Riley and Rep. Hansen. It is primarily about the May incident at TOCDF. In addition there have been some questions raised about the CSEPP program.

Rosemary Holt: Will there Utah people attending?

Dr. Patton: There are Utah people that have been called to testify.

Rosemary Holt: Is there some way that we can get information about that meeting?

Dr. Patton: Bill Johnson who advises Rep. Hansen should be able to give you more information.

Dennis Downs: I have talked with Bill and he doesn't know either. I will be likely be asked to testify at that hearing. If I hear additional details I will pass them on to Danny. My understanding is that as a state agency we will present our findings in a summary report at the hearing.

Dr. Patton: This will be a three tier hearing. The first tier will be those people who are responsible for the reports such as the Army, DEQ, Centers for Disease Control and EG&G. The second tier would be local people that have responsibility such as the County Commissioners and the Tooele Emergency Preparedness people. The third tier will be statements and questions by the Secretary of Defense policy office, myself and Mr. Bacon. They may be calling others. That is all we know right now but it is subject to change. We do not know what questions they will be asking but we feel very comfortable. Everyone has worked amazingly together to identify and resolve the problems. We feel very comfortable with the hearing. It is an opportunity to get the facts on the record instead of anecdotal information.

Deborah Kim: At the meeting in Little Rock I was involved in the medical portion. They spent a long time talking about "bench marking." How do you see this as a measurement of the program's budget request? Do you see that as being favorable? For those of us in health care to get to take on one more thing is tremendously expensive. So how is this going to help you?

James Bacon: It helps us to address whether or not we are protective of public health. The medical community is doing a lot of work to look at the whole process. I was impressed with the

medical session at Little Rock. We will integrate those requirements into the budget and I think we will be successful.

Deborah Kim: When are the bench marks going to be decided and will they available for us to review so that we can follow them along?

James Bacon: I will say yes but I need to back to the medical ---

Deborah Kim: Not just medical but all aspects of the CSEPP program.

Kari Sagers: In '93 or '94 bench marks were set. I believe that there have been a couple of other bench marks added, for a total of 13, that have been measured over the last seven years. I do know that there is talk of combining a couple of them. It is my understanding that it is more related to the CSEPP portion of the program.

Dr. Patton: I would like to make something very clear. The chemical stockpile protection program is in two parts. One part is on post which is managed by the Army. The off post is run by FEMA. People tend to mix up the chem demil program under PMCD with the CSEPP program as it is run by FEMA. We do not have anything to do with it, it is totally FEMA. We provide the money because it is allocated by Congress to the same pot of money that is allocated to Mr. Bacon's program (PMCD) Mr. Bacon then transfers it to FEMA. It would be inappropriate for us to respond because it is under FEMA.

Jason Groenewold: Dr. Patton, what are you doing programmatically to deal with issues and solve the problems related to the dunnage incinerator and the brine reduction area? Also, how are you implementing a resolution to the issue of carbon filters?

Dr. Patton: Those are technical questions and I am going to refer those to Mr. Bacon. I deal with politics and money.

James Bacon: The brine reduction area is operated in some of the facilities currently, Johnston Island for example. We do not use the dunnage incinerator at Johnston Island. We use the better more efficient methods to destroy the uncontaminated material. Anything that is contaminated is processed through the parts furnace or one of the other furnaces. We are testing for ways to treat secondary waste such as the demil protective ensembles (DPE suits). We continue to look at disposing of the carbon from the carbon filter systems. We are looking a couple of methods.

What we are really doing is eliminating one emission source and cutting back to three furnace systems are opposed to four but still obtaining the same results. The objective is to safely treat the waste. If it is uncontaminated wood products we look at the best way to do that. Whether it be a commercial treatment disposal facility or we treat it on site. We are looking at secondary waste as well as the waste that comes from the storage activities of the chemical weapons. Once the destruction of chemical weapons is gone all waste related to chemical weapons will also be gone.

Jason Groenewold: It is my understanding that dunnage incinerators are still part of the design at the other three facilities and I am curious to know if you are still planning to build those in places like Arkansas? If you haven't had success here and on Johnston Island why would that be done? **James Bacon:** We will not build those systems if we are not going to use them.

Jason Groenewold: Haven't you constructed them in Oregon?

James Bacon: No, we have not. All of the processing of secondary waste - the things that the

dunnage incinerator was originally thought to be used for - will be processed in accordance with permit requirements and whatever modifications that we need to have to make sure that we meet that state and EPA requirements.

Jason Groenewold: Dr. Patton, you said that TOCDF has been a model for implementing the safety changes that have been identified elsewhere. Could you explain why design changes were not made to the deactivation furnace prior to the May release?

Dr. Patton: I don't think I said exactly that. I think I said that TOCDF is a model as the first operating facility within the continental United States. Naturally a number of system design changes have been identified through the operations at TOCDF. Every safety factor and improvements that were identified at Johnston Island was incorporated in the design here. I don't know why you don't think it was not done. Do you have some facts that I don't have?

Jason Groenewold: If came from the EG&G report. The isolation valve for example. Some of the reports talk about the repeated problems with material jamming in the deactivation furnace.

James Bacon: We are in a continuous improvement process. Yes, we did not have an automated isolation valve at TOCDF. It was a manual process. The risk assessment is done and we recognize in the event that we need to close that valve off it is better to have it automated and that is what we have now done.

Dr. Patton: Was that identified at Johnston Island?

Jason Groenewold: Yes.

Dr. Patton: I don't think so. I think that it was identified through this incident.

Jason Groenewold: We were told that it was already part of the design in Arkansas and Alabama so the only conclusion is that it came from JACADS.

James Bacon: It was incorporated in the construction.

Dr. Patton: We keep learning. No one has ever done this before. There are no absolutes and you learn as you go. The United States is leading in not just the amount of tonnage destroyed but in the capability to safely destroy.

Jason Groenewold: The reason that we are concerned is because facilities like CAMDS and JACADS were supposed to have identified these problems. We are still seeing these same problems occur at TOCDF.

Dr. Patton: I don't know what your background is but recognize that those prototype facilities identified what they could. Again, there are no absolutes. At no time has the volume and capability that TOCDF has ever been done before. They did identify problems at CAMDS and JACADS and those led to improvements and safety oriented engineering changes. This facility has run for four years and this first incident with any of those parts that were identified in those reports. I think that is a good record. As soon as it was identified the system was shut down and the improvements are being put in place.

Doug Duncan: If you look at the functional analysis workbooks they talk about the isolation valve. They mention the manual plate, that we used at TOCDF, which was supposed to serve the same purpose as the isolation valve. When this incidence occurred we realized that we could use the isolation valve to prevent that also, but that wasn't the original purpose of it. We performed the same function in a different way. Essentially we performed the same function slightly

differently and then the incident showed that there was another function that we could have if we had the isolation valve.

All of these sites are different. For instance JACADS has a sea wall, we don't have a sea wall. We have heat tracing on our piping because they tend to freeze in the winter. JACADS doesn't have to be concerned with that. There are lessons learned at JACADS that don't apply to TOCDF. Each lesson learned is evaluated on a case by case basis to determine if it is applicable to a different site. A lot of times we will find a solution that came up on Johnston Island is not applicable to our plan but there is a solution needed and we will come up with a different solution to solve that problem.

Jason Groenewold: I appreciate that but I was looking at this particular event where it had been identified before but wasn't installed prior to the event.

Doug Duncan: I don't believe the isolation valve was identified to prevent a release. It was more in there to bottle up the furnace, which is what we did manually.

Marty Gray: I want to add another aspect as to why these facilities are not the same. The regulatory agencies are not all the same. When the TOCDF permit was first issued it was jointly written by the EPA and the state. That isolation valve with the pressure inlet was part of that design but it was rejected by the EPA because there was potential to use the pressure inlet to dilute the stack air. Therefore it invalidates the monitoring. We have a way now to prevent that concern.

Jason Groenewold: With the maturity in the demonstrations that are taking place with alternative technologies are you looking to implementing those systems at the facilities that are being considered for incineration?

Dr. Patton: Those technologies will be evaluated. In the middle '80's the basic part of the neutralization hydrolosis alternative technology was baseline technology and incineration was the alternative. At that time the National Research Council stated that there was some problems with the secondary waste from the neutralization and incineration had proven to be safer as far as contaminates to the environment. First you have to determine the technology before it can be considered at the facilities.

Rosemary Holt: Dr. Patten has referred to "anecdotal information" from the media around the country. I would like to add that I feel that we have quality reporting from the local media. The Deseret News, Salt Lake Tribune, Transcript Bulletin and EG&G's newsletter have all been objective.

Following the meeting there was a barbecue. The meat was provided by Sid Hullinger and the rest of the meal was provided by Tooele County Emergency.